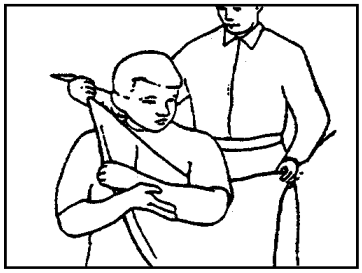
Sling and swathe

The sling-and-swathe technique provides soft splinting using 2 large, triangular bandages to stabilize a dislocation or fracture of an upper extremity. Properly applied, sling and swathe is safe and useful for many types of injuries. Keep in mind that you must use careful application techniques and reassess frequently to ensure continuing circulation to the affected area. The technique is illustrated in the series of figures below.

Begin by explaining the need for immobilization. If the student is wearing any jewelry on the arm or hand, remove it and give it to the student for safekeeping.

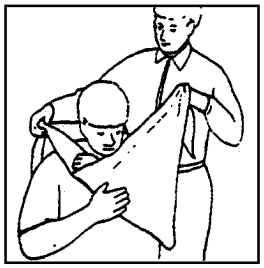
Check the pulse, capillary refill time, skin color, and sensation distal to the injury. If neurovascular integrity is compromised, **do not attempt to reduce the injury or reposition the arm!** Apply a splint or other support device to immobilize it in the presenting position, taking care to immobilize the joints both proximally and distally. If angulation at the injury impairs distal circulation, move the extremity toward its normal physiologic position using **gentle** traction, **just** until a palpable pulse returns, before immobilizing.

FIGURE 11–8. SLING AND SWATHE

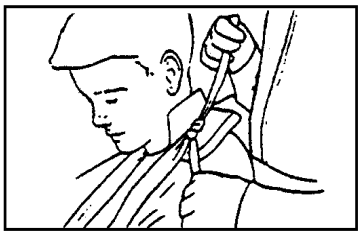


◀ If you can do so without exacerbating the injury, gently position the student's arm so that the hand is at least 4 inches above the level of the elbow. To create the sling, unfold the first bandage and place it so that its widest angle is behind the elbow of the injured arm. Bring the bandage point that's nearest the chest up and over the opposite shoulder.

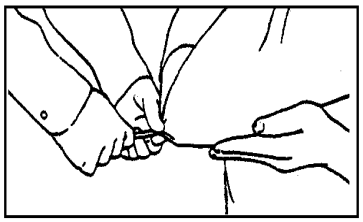
Next, bring the other point of the bandage up and over the injured arm and shoulder. ▶



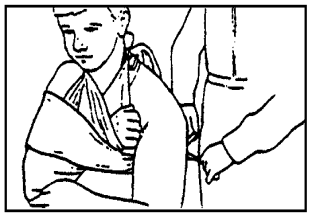
▼ Adjust the length as necessary and tie the ends. The arm should be well supported, relieving pressure on the shoulder. Place the knot so that it lies over the shoulder rather than against the cervical spine. Placing a pad under the knot will enhance comfort.



Secure the sling at the elbow with a safety pin, tape, or knot, creating a pocket in which the elbow rests securely. ▶



Reassess neurovascular integrity. Adjust the sling if necessary to maintain circulation.



◀ Lay the second bandage flat, then fold it several times lengthwise. Use the folded bandage to swathe the injured arm against the chest wall, immobilizing it.

Reassess neurovascular integrity every 5 to 10 minutes.

NOTE Any immobilized area should be closely monitored for continuing neurovascular integrity.

Triage and Transport

Triage musculoskeletal injuries as detailed below. (Also see the *Musculoskeletal Injury* algorithm in *Appendix A.*)

Emergent

Consider the student's condition emergent if there is severe trauma, compromise of the airway, breathing, or circulation, or abnormal level of consciousness. Emergent injuries require immediate EMS transport. Examples include

- Amputation (see Chapter 4)
- Degloving injury
- Evidence of neurovascular compromise (distal pulselessness, delayed capillary refill, abnormal skin color, cool skin temperature, numbness or loss of sensation in the affected extremity)
- Third-degree sprains with severe pain, edema, and point tenderness
- Any suspected femoral fracture (monitor for shock)

Urgent

If there are signs indicating a closed fracture, dislocation, or severe sprain **without** evidence of ABC compromise or loss of neurovascular integrity, consider the student's condition urgent. Signs to look for include restricted movement in the affected limb, pain or inability to bear weight, edema, and deformity. If you have an intuitive sense that the student's condition is urgent, trust your instincts.

If the student's condition appears to be stable and the injured area has been adequately immobilized, it may be appropriate for the parent/guardian to provide transport. Call for EMS transport if you have any doubts about the student's condition or the stability of the injury.

Nonurgent

Consider the student's condition nonurgent if the ABCDs and neurovascular integrity are normal **and** there is

- No obvious deformity
- Only minor edema
- At least partial ability to bear weight or use the extremity

In nonurgent cases, ensure student safety and notify the parent/guardian to transport the student to a primary care provider.

Documentation and Data Collection

If you refer the student to a hospital or primary care provider, be sure to send along a written summary of your nursing assessment and interventions. Include both subjective and objective findings from the history as well as the student's immunization status for tetanus, and note any pertinent information regarding chronic health conditions or special needs.

Record this information on the student's health record, and add information regarding the date of the student's return to school and the outcome (such as modifications in

activities) as soon as they are known. After the student returns to school, levels of care and interventions needed during the school day should be recorded periodically until the incident is closed.

Prepare an incident report as required by school policy, documenting nursing care, referral, and outcome. You'll find a sample form in the Chapter Resources section of Chapter 3: *Assessment and Triage.*

Evaluation and Follow-Up

Evaluation

If EMS was activated, evaluate the effectiveness of the school's emergency plan, including the following elements:

- The school staff response
- Elapsed time before EMS providers arrived on the scene
- The service that responded to the 911 call
- Oral report to EMS responders
- Communication with the emergency physician

Follow-Up

Make sure you receive a completed form signed by the primary care provider so that you can develop a plan of intervention for the student's return to school. This information will also help you complete the incident report.

Your plan of care depends on sequelae and outcome stemming from the injury, including

- Whether surgical intervention was required
- The anticipated duration of the recovery period
- The need for homebound instruction during recovery
- Anticipated requirements for special transportation, classroom modification, or restricted activities at school

Using this information, you can plan to accommodate the student's needs at school. Facilitate arrangements for special transportation, mobility problems, transfer activities, and assistive devices, such as a wheelchair, crutches, or a walker. (An overview of crutch-fitting and gait training appears in the *Chapter Resources* section.) Be prepared to help the student deal with emotional issues, such as frustration or reduced self-esteem caused by physical limitations and loss of mobility. Consider whether the student will need help performing activities of daily living and create an individualized health care plan (IHCP) that reflects the student's tolerance levels. Modify the care plan as wellness improves.

Intentional Injury

KEY POINT

Consider the possibility of child abuse whenever an injured student reports to the health office.

Every time a student reports to the health office with an injury, consider the possibility that the injury might have resulted from an intentional act, either committed by another person or self-inflicted by the student.

To determine whether further investigation is warranted, assess whether the history of the incident is consistent with the injury and with your knowledge of the student's abilities. If necessary, you may need to request intervention from a child protection agency.

Child maltreatment is illegal, and in most states you are mandated to report even a suspicion of abuse to the appropriate state agency.

Prevention

Make yourself aware of every feature of the school's physical plant, grounds, and boundaries with an eye toward injury potential. Use data collection to determine where and when students are injured, then try to address the cause. Are safety procedures emphasized during all school activities? Is the playground equipment safe, structurally sound, and appropriate to the developmental level of students who attend the school?

During mass episodes of illness or trauma, you will need additional assistance from personnel who are trained and certified in delivering first aid and CPR. Make sure your emergency plan provides for this possibility.

Many state laws require school and coaching staff to maintain current first aid certification. Some school boards also retain an athletic trainer who provides in-service education for coaches and staff, works closely with health care staff to evaluate injury prevention practices and rehabilitation measures, and maintains the safety of sport and athletic equipment. If you have no athletic trainer at your school, you must take responsibility for working cooperatively with physical education teachers and coaches to promote prevention, immediate care for injuries, and subsequent rehabilitation.

Students With Special Health Care Needs

You may need to adjust your approach when a student with special needs suffers a musculoskeletal injury. Proceed based on your knowledge of the student's developmental level, cognitive abilities, facility with communication, and ability to cooperate. Explain your actions in a manner the student can understand.

Some students with special needs depend on medical assistive devices or support equipment (oxygen, wheelchair, walker); others require chemotherapy, special feedings, or intermittent catheterization. These factors can affect your evaluation and triage decision as well as follow-up care. Arrangements may be needed for students who require special transportation to and from school.

Remember that EMS, hospital personnel, and other health care providers will need information on the student's condition as well as the data in the IHCP.

Summary

Musculoskeletal injuries range from simple strains and sprains to joint dislocations and bony fractures. During your assessment, it's essential to determine the mechanism that caused the injury, as this may affect your evaluation of its severity. Use observation, inspection, and palpation techniques, including range of motion evaluation, to guide your nursing diagnosis and determination of triage category.

Your primary goals in treating these injuries are to prevent morbidity and alleviate pain. For many soft tissue injuries, the mnemonic *RICES* points the way to appropriate management steps. For injuries that require immobilization and further treatment, such as suspected fractures and dislocations, use the sling-and-swathe technique or appropriate splinting strategies to stabilize the area until transport arrives.

Resources

School Nurse Emergency Medical Services for Children (SNEMS-C) Course Manual. Farmington, CT: University of Connecticut Health Center, Department of Pediatrics; 1996.

Trauma Nursing Core Course: Provider Manual. 5th ed. Des Plaines, IL: Emergency Nurses Association; 2000.

Chapter 11 Resources

CONTENTS

Crutch-Fitting and Gait Training

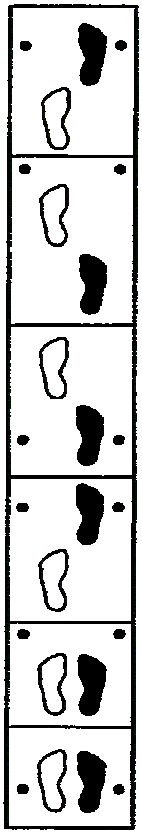
A student with an injury to a lower extremity may require crutches. For maximum mobility and comfort, it's essential that the crutches be properly fitted and the student taught to walk with them correctly. In most cases, you will fit the student for crutches only as a temporary measure, but it's important to know how this is done. It can be very helpful as well to assess gait and use of the crutches when the student returns to school. You can correct deficiencies at that time.

Fitting

Have the student stand on the uninjured leg and place the crutches under the axillae. Adjust the length of the crutches so that you can place 2 fingers between the cushion and the axilla on each side.

Have the student grasp the handgrips, then adjust them so that the student's elbow is slightly flexed.

Have the student stand upright on the crutches and reassess the fit. The crutches should fit properly when the tips are slightly anterior and lateral to the feet.



START
(black indicates injured leg)

Gait Training

Have the student stand with the crutches for several minutes until they are comfortable. Clear the pathway of any obstacles.

Stand slightly behind and to the side of the student, providing support.

Instruct the student to look straight ahead rather than down when walking with crutches. It is a common tendency for those who are new to crutches to look at their feet.

Tell the student to adopt a tripod position, with the weight on the uninjured leg and the crutches at either side.

Have the student move the injured leg and the crutches forward simultaneously. The student's weight should be on the handgrips, not the underarm pads.

Instruct the student to swing the uninjured leg through and slightly ahead of the crutches, then return weight to that leg. Move the injured leg and the crutches forward again.

Watch as the student moves about the room. Make corrections as necessary.

Encourage the student to treat the crutches as medical assistive equipment. They should not be used to roughhouse or play. Other students should not borrow them to "try them out."

CHAPTER 12

Psychobehavioral Emergencies

On completing this chapter, you will be able to

- Describe appropriate interventions for a psychobehavioral emergency.
- Perform a mental status examination to assess a behavioral emergency.
- Demonstrate techniques for communicating effectively with a violent or suicidal student.
- Identify community resources that can help you deal with violent, mentally ill, or suicidal students.

This chapter covers the following areas

- Types of pediatric mental illness
- Special techniques for assessing students with behavioral problems
- Dealing with conduct disorders and violence
- Dealing with the suicidal student
- Students with special health care needs

Introduction

Mental illness in children is all too often unrecognized or untreated, mostly due to the common misconception that children do not suffer from mental illness. Researchers at the National Institute of Mental Health have found that approximately 10% of our nation's children and adolescents have a mental disorder—yet only a fifth of them actually receive mental health care. By 2020, the World Health Organization projects that neuropsychiatric disorders will be among the top 5 causes of pediatric morbidity, mortality, and disability.

Children with severe emotional or mental disorders who might once have been relegated to large institutions are now likely to be living in the community while coping with their problems. These factors have contributed to an increase in psychobehavioral emergencies within the school setting.

All individuals who suffer mental illness—children and adults—carry a heavy burden. They must cope not only with their illness, but also with the social stigma associated with these disorders. People still tend to believe that mental and emotional problems arise from character flaws; hence the popular notion that wellness can be achieved by trying harder: *"If you would just pull yourself together…."*

Although ongoing research has clearly demonstrated the biologic component of mental illness, these attitudes continue to hinder timely diagnosis and appropriate interventions for child and adolescent populations. In addition, many precursors of emotional illness are difficult to distinguish from the spectrum of normal child and adolescent behaviors.

It is therefore important to recognize, first, that children **are** subject to such serious mental problems as clinical depression, schizophrenia, and anxiety disorders. They grapple with the emotional repercussions of conduct disorders or the devastating cycle of substance abuse and addiction.

And second, these children **can** be helped. Our understanding of the mind's workings is constantly improving, opening new therapeutic pathways. Even those who suffer from such pervasive developmental disorders as autism may function on a high level with appropriate therapy.

By heightening your awareness of such problems and the resources that are available to these children, you can help them gain the assistance they need to attain optimum wellness.

This chapter focuses primarily on management of conduct disorders (violent behavior, bullying) and suicide. Interventions for acute exacerbations of mental and emotional problems are described, as well as steps you can take to prevent recurrence.

Common Pediatric Mental Illnesses

Typically, school systems have mechanisms in place to evaluate students for mental illness. Types of mental illness that students may present with at your school include depression, schizophrenia, anxiety disorders, and eating disorders. These problems are briefly described below.

Depression

Depression may be situational, maturational, or clinical. The depressed student may exhibit sadness, joylessness, a lack of spontaneity, or a flat affect (lack of emotion).